### UNITED STATES PATENT AND TRADEMARK OFFICE

### **CERTIFICATE OF CORRECTION**

PATENT NO. : 6,783,948 B1 Page 1 of 3

APPLICATION NO. : 09/626566

DATED : August 31, 2004

INVENTOR(S) : Qingping Jiang et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 45, line 61, insert the following prior to N-(4'-Benzyloxy)phenylisatin:

#### --Example 10

Synthesis of 2-OH-Spiroacridan (12) and 2-Phos-Spiroacridan (11)

This certificate supersedes the Certificate of Correction issued July 3, 2012.

Signed and Sealed this Eleventh Day of December, 2012

David J. Kappos

Director of the United States Patent and Trademark Office

# CERTIFICATE OF CORRECTION (continued) U.S. Pat. No. 6,783,948 B1

Columns 47-50, after the paragraph following Example 11, delete formulas 13 and 15 and insert the following formulas 13 and 15:

Column 67-68, claim 18, delete "claim 18" and insert the following claim 18:

--18. A chemiluminescent substrate of a hydrolytic enzyme, said substrate having the structure

wherein

P is selected from the group consisting of  $PO_3H_2$ ,  $PO_3K_2$ ,  $PO_3(NH_4)_2$ ,  $PO_3Ca$ ,  $PO_3Mg$ ,  $PO_3Na_2$ , a sugar moiety and C(=O)R group wherein R is an alkyl group having 1 to 6 carbon atoms;

M is oxygen;

R<sub>1</sub> is selected from the group consisting of methyl, sulfopropyl, sulfobutyl, sulfoalkyl, and

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carboxymethyl;

 $R_{2a}$ ,  $R_{2b}$ ,  $R_{2c}$ ,  $R_{3a}$ ,  $R_{3b}$ ,  $R_{3c}$ , and  $R_{3d}$ , can be the same or different, selected from a group consisting of hydrogen, methyl, methoxy, halides, cyano (–CN);

 $A^{-}$  is a counter ion for the electroneutrality of the quaternary nitrogen of the acridinium compounds, said  $A^{-}$  not being present if said  $R_{1}$  substituent contains a strongly ionizable group that can form an anion and pair with the quaternary ammonium cationic moiety; and

 $X_1$  and  $X_2$  are the same or different and are selected from the group consisting of O, N or S, such that,

when  $X_1$  and  $X_2$  are O or S,  $R_{11}$  is selected from the group consisting of hydrogen, -R, substituted or unsubstituted aryl, halides, nitro, sulfonate, sulfate, phosphonate,  $-CO_2H$ , -C(O)OR, cyano (-CN), -SCN, -OR, -SR, -SSR, -C(O)R, -C(O)NHR, ethylene glycol, or polyethyelene glycol, where R is as defined above; and

 $Z_1$  and  $Z_2$  are omitted; and

when at least one of  $X_1$  and  $X_2$  is N,  $Z_1$  and  $Z_2$  are toluenesulfonyl, and  $R_{11}$  is carboxypropyl.--